



UNITED STATES PATENT AND TRADEMARK OFFICE

SK  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,140	11/27/2001	Ofir Shalvi	T1-32258	9943
23494	7590	05/03/2005		
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			EXAMINER YANG, LINA	
			ART UNIT 2665	PAPER NUMBER

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/995,140	SHALVI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lina Yang	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 11/27/2000.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 3/13/2002 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show:
  - a. first manager and second manager as in claims 1 and 21;
  - b. first network and second network as in claims 1-4,7,810-15,18 and 20;
  - c. cable network as in claims 2, 13, 21, and 22;
  - d. home network as in claims 3, 4, 14, 15, 21 and 22.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claimed features of having: "a first manager for allocating a first time slot to a first network; and a second manager for allocating a second time slot to a second network such that one of the first time slot or the second time slot begins a short time before the other of the first time" as in claims 1 and 21; and method steps of: "allocating a first time slot to a first network; and allocating a second time slot to a second network such that one of the first time slot or the second time slot begins a short time before the other of the first time slot or the second time slot begins wherein data is transmitted between the second network and the first network during the first

time slot or the second time slot" as in claims 13 and 22 were not described in the specification.

To be more specific, according to page 10 of the specification disclosure, the claimed invention is directed to provide the Synchronized Managed Networking (SMN), as described in paragraph [27] in the specification. The operation of SMN is described in Fig. 4 and in paragraph [28] lines 1-8 for the case of the DOCSIS upstream network: "The DOCSIS 50 manager allocates time slots for an upstream high QOS stream at a time period T 52. The HN 54 manager, which is typically implemented at the cable gateway (e.g. a CM or a STB), learns the timing of the stream in the DOCSIS 50 network, and based on that, reserves timing slots for the stream in the HN. The learning of the stream timing may be done using messaging between the CMTS and the HN manager, and using the time-sync mechanism of the DOCSIS 50 MAC. The stream timing can also be learned passively without any special messaging, but that would typically be less efficient."

Thus, according to the specified operation of SMN, the learning of the stream timing in the DOCSIS 50 network is essential to reserve timing slots for the stream in HN. However, none of the claims either recite the learning of the stream time or reserving timing slots, to enable any person skilled in the art to carry out the claimed invention.

Furthermore, claims 4 and 15 recite: "...the first network and the second network are home networks". Such combination of communication system having "a first

manager for allocating a first time slot to a first *home* network; and a second manager for allocating a second time slot to a second *home* network such that one of the first time slot or the second time slot begins a short time before the other of the first time” was not specified in the specification. Thus, the claims and the specification fail to enable one skilled in the art to make and/or use the invention.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being vague and indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 21 recite: “a first manager for allocating a first time slot to a first network/cable network; and a second manager for allocating a second time slot to a second network/home network such that one of the first time slot or the second time slot ***begins a short time before*** the other of the first time slot or the second time slot begins wherein data is transmitted between the second network and the first network during the first time slot or the second time slot”. Both claims do not define as to how two different time slots are allocated to two different networks and thereby to make one time slot begins a short time before the other time slot.

Claims 12 and 22 recite: "...the first time slot or the second time slot **begins a short time before** the other....". Both claims do not define as to where the first manager and second manager are located and how the first manager interacts with the second manager in order to allocate two different time slots to two different networks and thereby to make one time slot begins a short time before the other time slot.

Claim 22, line 1, the preamble recites "A method for synchronizing a cable network and a home network". However, the body of the claim does not define as to how the synchronization is achieved by the recited method steps.

4. In view of the above 35 U.S.C. 112 first and second paragraphs rejections, there is no prior art rejection can be applied at this time.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Massey. (US Patent No. 5,384,563) discloses a method and apparatus for time synchronization of two networks. Palmer et al. (US Patent No. 6,141,355) teaches a time-synchronized multi-layer network switch for providing quality of service guarantees in computer networks. Quigley et al. (US Patent No. 6,650,624 B1) and (US Patent Application No. 20010055319 A1) teaches a number of features for enhancing the performance of a cable transmission system in which data is transmitted between a cable modem termination system at a headend and a plurality of cable modems located different distances from the headend. Rabenko et al. (US Patent No. 6,763,032 B1) discloses a method for communicating information is disclosed wherein a time slot is allocated in a time division multiple access system for a transmission from a subscriber to a headend. Synchronization of a clock of the subscriber with respect to a clock of the headend is enhanced using a message transmitted from the headend to the subscriber which is indicative of an error in a subscriber transmission time with respect to the time slot.

Art Unit: 2665

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151.

The examiner can normally be reached on 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



ALPUS H. HSU  
PRIMARY EXAMINER